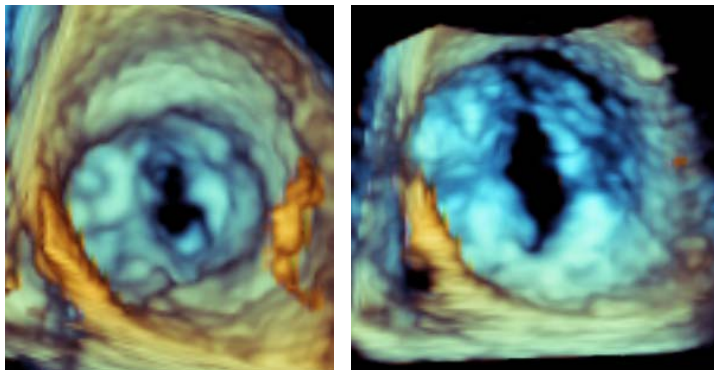


## Questions on 3D Echocardiography



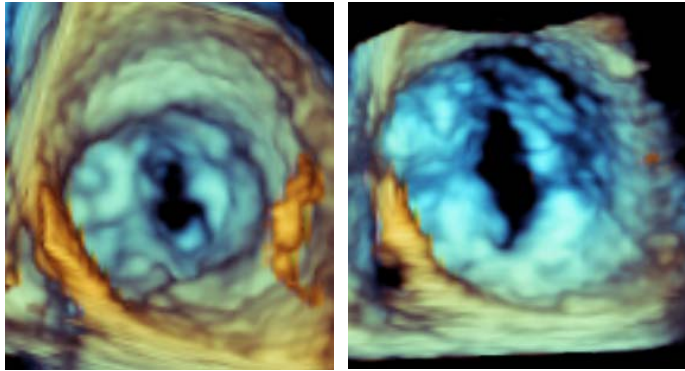
@RobertoMLang

Which percutaneous intervention did this patient undergo?



1. Mitral valve clip
2. Valve-in-valve
3. Balloon mitral valvuloplasty
4. Perivalvular leak closure

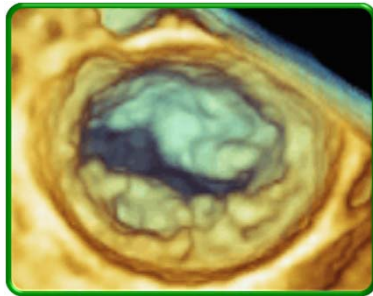
Which percutaneous intervention did this patient undergo?



1. Mitral valve clip
2. Valve-in-valve
3. **Balloon mitral valvuloplasty**
4. Perivalvular leak closure

Which MV has the best suitable anatomy for mitral valve repair ?

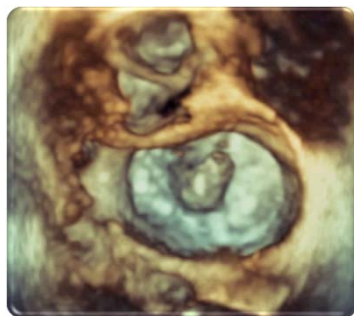
A



B



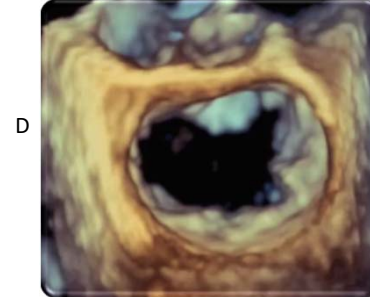
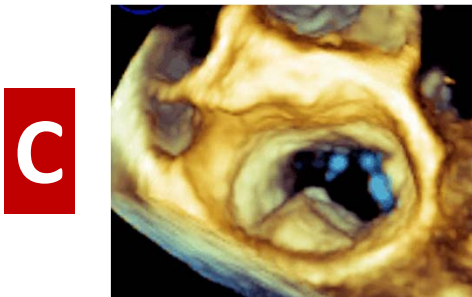
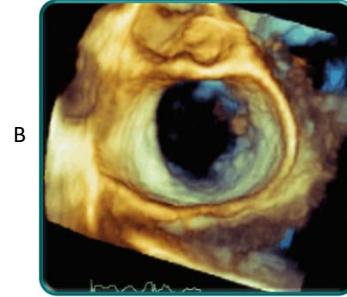
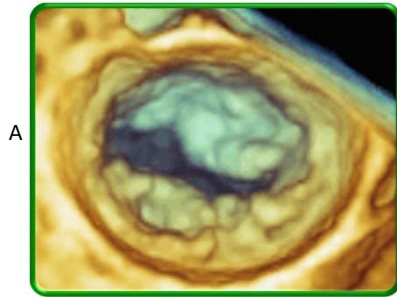
C



D



### Which is the best anatomy for mitral valve repair ?



### Which of the follow statements regarding left ventricular volumetric measurements is true?

1. LV Volume calculations can be accurately derived from linear measurements.
2. With 2D echocardiography, contrast agents improve endocardial delineation and provide smaller volumes than non-contrast images.
3. Left ventricular volumes using three-dimensional echocardiography are larger than those obtained with CMR
4. Left ventricular volumes obtained with three-dimensional echocardiography are more accurate than those acquired with 2D echocardiography when compared to an MRI gold-standard.

Which of the follow statements regarding left ventricular volumetric measurements is true?

1. LV Volume calculations can be accurately derived from linear measurements.
2. With 2D echocardiography, contrast agents improve endocardial delineation and provide smaller volumes than non-contrast images.
3. Left ventricular volumes using three-dimensional echocardiography are larger than those obtained with CMR
4. **Left ventricular volumes obtained with three-dimensional echocardiography are more accurate than those acquired with 2D echocardiography when compared to an MRI gold-standard.**

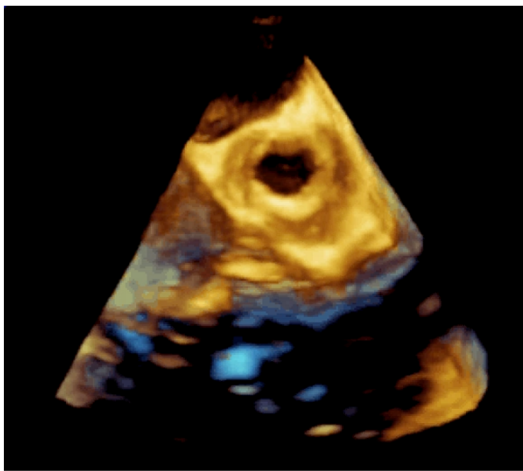
**Which of the following statements regarding two-dimensional echocardiography and three-dimensional echocardiography in the assessment of left ventricular volumes is true?**

1. Apical images are frequently foreshortened on two-dimensional echocardiography leading to overestimation of volumes.
2. Three-dimensional echocardiography volumetric assessment avoids the geometric assumptions needed to calculate volumes on two-dimensional echocardiography.
3. Two-dimensional echocardiographic volume measurements account for regional wall abnormalities.
4. Three-dimensional echocardiography provides more accurate measurements when acoustic windows are poor compared to two-dimensional echocardiography.

**Which of the following statements regarding two-dimensional echocardiography and three-dimensional echocardiography in the assessment of left ventricular volumes is true?**

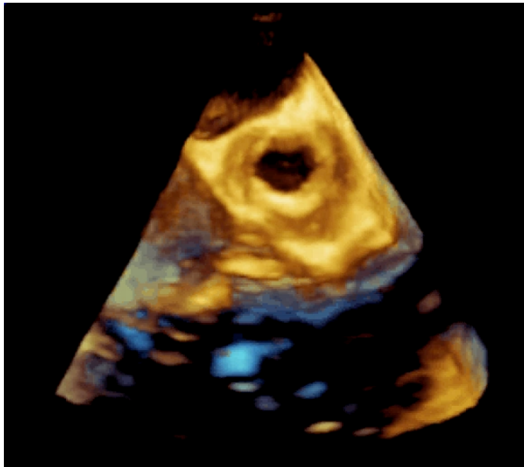
1. Apical images are frequently foreshortened on two-dimensional echocardiography leading to overestimation of volumes.
- 2. Three-dimensional echocardiography volumetric assessment avoids the geometric assumptions needed to calculate volumes on two-dimensional echocardiography.**
3. Two-dimensional echocardiographic volume measurements account for regional wall abnormalities.
4. Three-dimensional echocardiography provides more accurate measurements when acoustic windows are poor compared to two-dimensional echocardiography.

**What is the most likely diagnosis?**



1. Bicuspid aortic valve
2. Aortic valve post TAVR
3. Unicuspid Aortic Valve
4. Trileaflet Aortic Valve

## What is the most likely diagnosis?



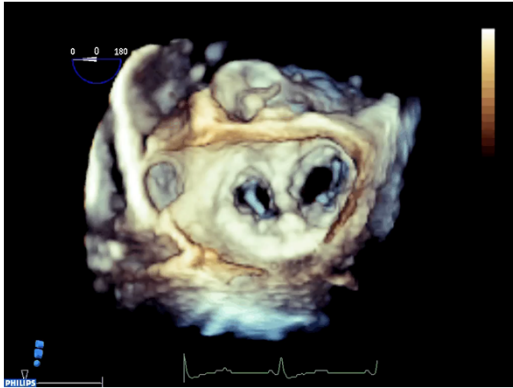
1. Bicuspid aortic valve
2. Aortic valve post TAVR
- 3. Unicuspid Aortic Valve**
4. Trileaflet Aortic Valve

## Which percutaneous intervention did this patient undergo?



- 1. Valve-in-valve**
- 2. Mitral valve clip**
- 3. Perivalvular leak closure**
- 4. Annuloplasty ring**

Which percutaneous intervention did this patient undergo?



1. Valve-in-valve
2. **Mitral valve clip**
3. Perivalvular leak closure
4. Annuloplasty ring



@RobertoMLang